

<b>BROOKHAVEN NATIONAL LABORATORY</b> Safety & Health Services Division  <b>INDUSTRIAL HYGIENE GROUP</b> Standard Operating Procedure: Program Procedure	NUMBER <b>IH91100</b>
	REVISION <b>Final Rev 0</b>
Subject: <b>BNL Confined Spaces Program Service Delivery by BNL Organizations</b>	DATE <b>07/13/05</b>
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### **1.0 PURPOSE & SCOPE**

The purpose of this procedure is to document the role of the BNL organizations in the delivery of services that lead to an effective Confined Space Entry program. As a minimum, the BNL program will comply with OSHA 29CFR 1910.146 *Permit Required Confined Spaces* and DOE Order 440.1A and 5480.4. This SOP documents program components not addressed in SBMS Subject Area Confined Spaces and is a companion to that subject area and other organizational SOPs and documents.

### **2.0 RESPONSIBILITIES**

- 2.1 The overall BNL program is implemented through the SHSD Industrial Hygiene Group Leader who assigns the duties to a *Confined Spaces Program Administrator*.
- 2.2 Members of the SHSD Industrial Hygiene Group, the Radiological Control Division Facility Support Group, Occupational Medicine Clinic, Emergency /Services Division, and Office of Training and Qualification, and line organizations fill certain roles in this program. This SOP does not confer any added responsibilities on a BNL organization, but does describe the current service delivery model in the BNL Confined Space program and delineates the role each organization traditionally plays.

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2.3 The duties of organizations participating in the BNL Confined Space Program traditionally include:

2.3.1 Safety and Health Services Division (SHSD) - Industrial Hygiene Group (IH)

2.3.1.1 Serve as Subject Matter Expert (SME) for the SBMS *Confined Spaces* subject area,

2.3.1.2 Conduct an annual audit to insure compliance with the provisions of the program,

2.3.1.3 Assist organizations in evaluating tasks and specifying the appropriate confined space requirements, classifications, and controls;

2.3.1.4 Assist the Training & Qualifications Group in preparing training material,

2.3.1.5 Maintain and issue confined space entry atmosphere testing equipment that may be used by some organizations for entry testing.

2.3.2 Radiological Control Division (RCD) - Facility Support (FS)

2.3.2.1 Conduct Atmosphere testing for Confined Space entry as contracted by line organizations.

2.3.3 Training and Qualification Group (TQ Group)

2.3.3.1 Develop training material for confined space entry equipment used at BNL,

2.3.3.2 Train laboratory personnel on Confined Space Entry Procedures & Roles and atmospheric testing principles.

2.3.4 Emergency Services Division

2.3.4.1 Provide confined-space rescue services (unless other provisions are made by a line organization). Remain on standby to assist on Class 2C (permit required) confined space entry. Notify entry supervisors or designees if they become unavailable to provide rescue and emergency services.

2.3.5 Occupational Medicine Clinic (OMC)

2.3.5.1 Provide medical approval for confined space entrants.

2.3.5.2 Evaluate medical problems related to confined space entrance.

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2.3.6 Line organizations

- 2.3.6.1 Conduct (or have conducted by a qualified service provider) atmosphere testing for Confined Space entry.
- 2.3.6.2 Calibrate, maintain and issue confined space entry equipment used for entry testing (or optionally, use equipment from SHSD). Qualify (or have qualified) atmosphere testers in the meter to be used.
- 2.3.6.3 Maintain an inventory of their confined spaces in the Emergency Services Division's Emergency Run card system.
- 2.3.6.4 Ensure that appropriate controls are in-place and that personnel are qualified for entry their role.

**3.0 DEFINITIONS**

none

**4.0 PREREQUISITES**

none

**5.0 PRECAUTIONS**

none

**6.0 PROCEDURE**

Equipment: none

BNL maintains a Confined Space program that contains:

6.1 Written Program consists of:

- 6.1.1 The SBMS subject area *Confined Spaces* specifies the requirements and duties for each division and department entering Confined Spaces and using Confined Space equipment.
- 6.1.2 This SOP describes the activities for service providers that support the BNL program.

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6.1.3 Organizational level SOPs document activities performed by a select group of service providers on a portion of the total program.

6.2 Confined Spaces Program Administrator (CSPA): The SHSD IH Group Leader designates a person to oversee the program. The role is responsible for arranging/conducting an annual appraisal of the confined spaces program and cancelled permits, tracking deficiencies and corrective actions initiated, and requirements management. This role is defined in detail in *IH91175*.

6.3 Medical Approval: The Occupational Medical Clinic (OMC) provides medical approval for persons entering confined space. Line organizations identify those needing medical approval via the OMC Job Assessment Form (JAF).

6.4 Training: TQ develops and delivers training to persons entering confined spaces. Entrants, atmospheric testers, confined space attendants and supervisors receive annual training courses conducted by TQ or comparable programs delivered by the line organization. TQ maintains records of this training. Line organizations identify those needing training in the Job Training Assessment (JTA).

6.5 Sampling for Confined Space Hazards: ESH&Q Directorate personnel (FS and IH), or qualified personnel from line organizations, conduct pre-entry and entry testing of traditional confined space hazards (O<sub>2</sub>, CO, LEL, H<sub>2</sub>S, etc). ESH&Q personnel, or qualified personnel from line organizations, conduct personal exposure monitoring on other hazards in confined spaces.

## **7.0 IMPLEMENTATION & TRAINING (QUALIFICATIONS)**

7.1 Only personnel who have demonstrated competency, to the satisfaction of their management, are qualified to perform a role in this program. There is no qualification for this specific SOP, but the underlying activities conducted in support of this program may have training or qualification requirements.

7.2 Each supporting organization shall establish competency and qualification criteria for the tasks to be assigned to their personnel. Criteria must be in compliance with the *Confined Space* subject area. Qualification criteria are established commensurate with the task to be performed. Records of qualification of service providers are

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documented and maintained by the service provider's organization management or BTMS, as appropriate.

## 8.0 REFERENCES

- 8.1 Occupational Safety and Health Administration (OSHA); *Permit-required Confined Spaces* 29CFR1910.146.
- 8.2 ANSI Z 117.1 *Safety requirements for Confined spaces*

## 9.0 ATTACHMENTS none

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## 10.0 DOCUMENTATION

Document Development and Revision Control Tracking		
Prepared By: <i>(signature/date on file)</i> N. Bernholc 11/26/04 Certified Industrial Hygienist	Reviewed By / Date: <i>(signature/date on file)</i> R. Selvey 07/06/05 Certified Industrial Hygienist	Approved By / Date: <i>(signature/date on file)</i> R. Selvey 07/13/05 Industrial Hygienist Group Leader
ESH Coordinator/ Date:  <i>none</i>	Work Coordinator/ Date:  <i>none</i>	SHSD Manager / Date  <i>none</i>
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ISM Review - Hazard Categorization <input type="checkbox"/> High <input checked="" type="checkbox"/> Moderate <input type="checkbox"/> Low/Skill of the craft	Validation: <input type="checkbox"/> Formal Walkthrough <input checked="" type="checkbox"/> Desk Top Review <input type="checkbox"/> SME Review Name / Date:	IMPLEMENTATION: Training Completed: n/a Procedure posted on Web: 07/13/05 Hard Copy files updated: 07/13/05

Revision Log		
Purpose: <input type="checkbox"/> Temporary Change <input type="checkbox"/> Change in Scope <input type="checkbox"/> Periodic review <input type="checkbox"/> Clarify/enhance procedural controls  Changed resulting from: <input type="checkbox"/> Environmental impacts <input type="checkbox"/> Federal, State and/or Local requirements <input type="checkbox"/> Corrective/preventive actions to non-conformances <input type="checkbox"/> none of the above  Section/page and Description of change:		
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